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應用知識軟體代理人於病歷管理系統

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摘要

電腦化病歷管理系統早期的發展仍強調的是被動的紀錄病患的所有資訊，提供一個容易存取的環境。隨著網際網路的流行與進步，整合區域內醫療資源，資料分享透過網路來存取病歷資料的需求也日益增加。由於醫療本身是一個以知識為基礎的行為，因此知識管理對於醫院的從業人員而言也是一項極重要的課題，病患記錄所能提供的知識，經由適當的管理，能提供醫師或護理人員於診間所需的資訊，進而對病患提供更好的服務，因此電腦化病歷也需從被動的紀錄功能提升成主動的知識管理。本論文的重點在於利用軟體代理人來協助在電腦化病歷管理系統進行知識管理。本論文提出一個電腦病歷管理系統的架構，透過軟體代理人建立一以組織記憶為主的知識庫，當在目前的知識庫中無所需要的知識時，知識查詢代理人便會向病歷資料庫送出要求，再經由網頁產生技術自動產生出 XML 文件，新的知識便以此文件格式儲存在知識庫中。每一位系統的使用者有其對應的代理人，協助管理其有興趣的知識。

關鍵字：知識管理;軟體代理人;醫院資訊系統;電腦化病歷管理系統

Integrating Knowledge Agents to Computerized Patient Record System

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Abstract

As the care function becomes increasingly distributed among multidisciplinary healthcare professionals, concepts and technologies to integrate the local health care resources and to share the medical data (patient information) are important nowadays. Since the health care industry is essential knowledge-based. Therefore the knowledge management and processing techniques are increasingly gaining the interest of hospital workers, physicians, pharmacists, patients, and so on. The patient information that maintained in computerized patient record can be treated as explicit knowledge from the healthcare providers. However, the growing volume of data for a patient from different source and presented in diverse format makes the knowledge management difficult. The purpose of this paper is to introduce a multi-agent system architecture for knowledge management in traditional computerized patient record system. A set of agents are identified to accomplish these knowledge management activities. The medical knowledge is captured in XML format.

Key words: Knowledge management; Software agent;
Hospital information system (HIS);
Computerized patient record system